

Claims

1. A method for enhancing somatic recombination characterized by promoting the homologous recombination of somatic cells in which DNA homologous recombination at a genetic locus is occurring by relaxing the chromatin structure of chromosomes in said somatic cells.
5
2. An antibody production method characterized in that, when producing antibodies from immunocytes in which DNA homologous recombination is occurring at an antibody locus, DNA homologous recombination is enhanced at the antibody locus by relaxing the chromatin structure of chromosomes in said immunocytes, and thereby diverse antibodies are obtained.
10
3. The method described in Claims 1 or 2, characterized in that the relaxation of the chromatin structure of chromosomes is induced by treating cells by putting them into contact with histone deacetylase inhibitor.
15
4. The method described in Claim 3, characterized in that the inhibitor is trichostatin A.
5. The method described in Claim 4, characterized in that the treatment concentration of trichostatin A is from approximately 0.5 ng/ml to approximately 5.0 ng/ml, and the contact treatment time is from approximately 2 weeks to approximately 6 weeks.
20
6. The methods described in Claims 1 through 5 characterized in that the cells are DT40 culture cells.
25
7. Immunocytes for which somatic homologous recombination has been promoted at a genetic locus by the method described in one of the claims among Claim 1, 3, 4, 5, or 6.
8. Diverse antibodies produced by the method described in one of the claims among the Claims 2 through 6.
30
9. The antibodies described in Claim 8, wherein the produced antibody is IgM.
10. A medicinal agent, being a medicinal agent for the promotion of somatic homologous recombination at a genetic locus, and comprising histone deacetylase inhibitor.
35

11. The medicinal agent described in Claim 10, wherein the inhibitor is trichostatin A.